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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,816	12/21/2001	Cliff Pemble	1528.020US1	5372

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EXAMINER

LOUIS JACQUES, JACQUES H

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,816

Applicant(s)

PEMBLE ET AL.

Examiner

Jacques H. Louis-Jacques

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-26 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-10, 12, 14-17, 19 and 27-34 is/are rejected.
- 7) ☒ Claim(s) 4, 11, 13 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 23 and 25 are objected to because of the following informalities: A claim cannot depend on itself. In the present case, claim 23 depends on claim 23 and claim 25 depends on claim 25. This is improper. For purpose of examination, claim 23 is considered to depend on claim 22 and claim 25 is considered to depend on claim 24.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-3, 5-10, 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Clark [6,462,707].

Clark discloses a satellite position monitor, wherein a first space-based GPS satellite broadcast a GPS navigation message. The GPS message is received by a second space-based GPS satellite, which determines the integrity and reliability of the navigation message. According to Clark, the second satellite is used a correction source for correcting the message received from the first satellite. It is determined as a criterion wherein the correction messages received from the satellite are reliable. See abstract, columns 2-3 and 7. Furthermore, Clark discloses comparing the message from the first satellite so as to determine or create a differential position as a criterion to determine integrity of the message. See columns 2-3. As described in column 3, this process is repeated, i.e., performed periodically. See also column 8. Clark also discloses a GPS system having a processor (100), a memory (118) in communication with the processor and receiver in communication with the processor for receiving GPS signals and WAAS correction signals (columns 3 and 4). According still to Clark, a desired source is determined based upon predefined criteria. See columns 5, 7-8.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14-17, 19, 27-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark '707 in view of Whitehead et al [6,469,663].

While Clark discloses a GPS system having a processor (100), a memory (118) in communication with the processor and receiver in communication with the processor for receiving GPS signals and WAAS correction signals, Clark does not specifically mention that the receiver receives both GPS signals and WASS signals. Whitehead et al, on the other hand, discloses a method and system for GPS and WAAS carrier phase measurements for relative positioning. According to Whitehead et al, there is provided a GPS/WAAS receiver that receives both GPS signals and WAAS signals. According further to Whitehead et al, the receiver includes a digital processing circuitry, a microprocessor, memory, and executable code and variable data stored in the memory operating in a conventional manner for decoding the navigation data; receiving and decoding reference data signals including those of WAAS code and carrier phase and the GPS code and carrier phase. Furthermore, the receiver is a portable receiver and comprises a wireless communication link (device). The system according to Whitehead et al comprises executable code, which may be embodied in the form of computer-implemented processes and apparatuses for practicing those processes. Thus, it would have been obvious to one skilled in the art at the time of the invention to be motivated to modify the system of Clark by incorporating the features from the method and system of Whitehead et al because such modification, as suggested by Whitehead et al, will provide faster and more reliable integer ambiguity resolution, while improving accuracy and reliability of the system.

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Allowable Subject Matter

6. Claims 4, 11, 13, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. Claims 20-26 are allowed.

Response to Arguments

8. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6,278,402	Pippin	Aug. 2001
6,377,892	Johnson et al	Apr. 2002
6,529,830	Eschenbach	Mar. 2003
6,603,426	Clark	Aug. 2003
US2002/0120400	Lin	Aug. 2002
US2002/0198001	Bajikar	Dec. 2002
US2003/0067409	Murphy	Apr. 2003

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Each of the above cited references are considered to be very pertinent to Applicant's claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques H. Louis-Jacques whose telephone number is (703) 305-9757. The examiner can normally be reached on M-Th, 7:30 AM - 4:00 PM (Eastern Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on (703) 308-3873. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1111.

Jacques H. Louis-Jacques
Primary Examiner
Art Unit 3661

/jlj


JACQUES H. LOUIS-JACQUES
PRIMARY EXAMINER